occurred. The median range of the hospital stay after tracheotomy was six to seven days. With the protocol of treatment as seen in a setting such as Childrens Hospital of Los Angeles, tracheotomy is a safe method of treatment of the airway problem associated with epiglottitis.

Cantrell and co-workers reviewed 740 cases of epiglottitis recorded in the literature. Of these, 348 (46.5 percent) were treated with tracheotomy, 216 (28.8 percent) with intubation and 214 (24.7 percent) with observation. The highest mortality rate (6.1 percent) occurred in the group of patients treated with observation. Mortality in the tracheotomized patients was 0.86 percent, while in the intubated group it was 0.92 percent.

The controversy, therefore, is not whether tracheotomy or intubation is the treatment of choice, but rather whether conservative measures with observation is ever indicated in this most unpredictable of infectious disease of the larynx. The choice of establishing the airway should be determined by the availability of adequate facilities in the institution in which the child receives care. A team comprised of a pediatrician, an anesthesiologist and an otolaryngologist is essential in the treatment of a child with epiglottitis.

Establishment of an airway whether by tracheotomy or endotracheal intubation is mandatory in the treatment of this disease. A tracheotomy may be necessary in some children because of difficulties encountered with intubation, or when complications of intubation may have occurred.

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Freeze-Dried Ear Transplants

FREEZE-DRYING is a useful technique for the preparation and preservation of bone and fibrous tissue transplant parts. There is minimal alteration of the tissue with this procedure. Compelling evidence shows that freeze-dried allograft tissue serves as a reliable template for creeping substitution or replacement by the recipient.

The middle ear transformer mechanism can be reconstructed like-part for like-part with freeze-dried otologic transplants. The advantage of this to the surgeon is the ease of availability of the tissue, which can be stored in small containers in any hospital at room temperature. The simplicity of its use also is attractive. Foreign body extrusion, that has been prevalent with the use of various plastics and metals, is avoided with freezed-dried material.

Freeze-dried dura periosteum, fascia and fibrous tympanic membrane are widely used for the repair of fibrous tissue defects in paratemporal bone lesions.

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Invasive Radiology In Head and Neck Surgical Operations

RECENT ADVANCES in invasive radiology have added new dimensions to management of vascular lesions of the head and neck. Percutaneous arterial embolization, originally used for thrombosis of arteriovenous malformations, has now been successfully used in the treatment of vascular neoplasms and hemorrhagic disorders. The technique involves the selective catheterization of branches of the carotid system. Major feeding vessels are identified fluoroscopically and carefully embolized using one of various clotting methods.

The preoperative embolization of vascular head and neck tumors such as angiofibromas or chemodectomas has been beneficial in reducing operative blood loss. In addition, this technique has been useful in palliative reduction of vascularity of unresectable lesions.

The control of hemorrhage has proven to be another valuable use for this technique. Duodenal bleeding, posttraumatic pelvic hemorrhage and epistaxis have all been reportedly controlled by arterial embolization.

Many substances have been tried as clotting agents. The safest of these is autologous tissue such as clotted blood or muscle. Other materials include metal filings, absorbable gelatin sponge (Gelfoam®), silicone as liquid or spheres, and polymerizing agents. The most promising technique involves the use of a detachable balloon catheter. Because it can be inflated and deflated before detachment, it offers the opportunity to evaluate changes in flow dynamics and potential